CALFED Actions List
Reorganized for Water Quality Team

Explanatory Note

This list was compiled to assist the Water Quality Team in evaluation of the CALFED actions' impact on water quality. The intent was to increase comprehensibility and to reduce redundancy.

The approach was to group actions into broad classes, then to describe and renumber individual actions within those classes. Much liberty was taken with the organization of the actions, but all of their content was retained. Also, impacts of the actions were not mentioned, unless they served to differentiate the action from others with different impacts. Benefits and constraints associated with the actions, including those cited in previous action descriptions, will be catalogued as a next step.

The following rules will help you understand groupings in the reorganized actions list:

- The broadest classes are shown in large, bold characters.
- Sub-classes within the broadest classes are shown in large, bold italics.
- Within sub-classes, indentation implies subordination.

For example, on the next page:

- Under the class "**Flow Management**" and the sub-class "***Dilution***", the group "Provide additional inflow..." contains two groups of actions. These are "Use 50,000..." and "Use new...".
- "Use new..." contains actions 8 and 9, as well as actions 10, 11, and 12, grouped under "Acquire water by constructing...".

D-032586

Reorganized Actions List

Flow Management

Dilution

Provide additional inflow of freshwater or alter timing of inflow, especially from the San Joaquin River.

Use 50,000 to 100,000 acre-feet of existing water supply (any surface water currently captured or groundwater currently pumped in the Central Valley) .

1. Alter timing of inflow by detaining agricultural drainage in the San Joaquin Valley.
2. Acquire water from willing sellers.
3. Acquire water by providing incentives for more efficient water management, including reservoir re-operation.
4. Acquire water through temporary fallowing.
5. Acquire water through urban water conservation.
6. Acquire water through wastewater reclamation.

Use new water supply (groundwater not currently pumped or new storage).

7. Acquire water by treating agricultural drainage.
8. Acquire water by developing additional groundwater supply.

Acquire water by constructing new storage.

9. Upstream of the Delta.
10. Downstream of the Delta (in the Delta-Mendota Canal, the California Aqueduct, etc.).
11. In the Delta.

Delta Facilities

Improve water circulation in the Delta.

12. Develop improvements at the head of Old River to block fish movement into Old River, and to manage water flow and stage down Old River.
13. Implement Delta Long-term Protection Plan (includes levee O&M).

Non-Point Source Pollution Control

Agricultural Drainage

Reduce salt and other agricultural drainage constituent loading to Delta by reducing drainage flows and/or concentrations. Highest priority are lands with costly and severe drainage problems.

14. Detain drainage water (restrict drainage discharges during periods of low Delta inflow) and control the timing of release.

Control the sources of agricultural drainage (reduce the amount, or improve the quality of applied water, or reduce loading of trace elements and agrochemicals).

15. Restrict spraying adjacent to waterways.
16. Provide incentives for additional source control, including higher water use efficiency and reduced agrochemical loading.
17. Provide a high-quality irrigation water supply.

18. Land retirement and temporary fallowing (especially during drought) through incentive programs.
19. Concentration and disposal of drainage water.

Treatment of agricultural drainage.

20. Treat in wetlands.
21. Treat 20 to 30 percent by other means (e.g. reverse osmosis) and recycle or use for flow augmentation.

Urban and Industrial Runoff

Reduce urban and industrial runoff constituent loading to Delta by reducing flows and/or concentrations. Highest priority are areas contributing largest amounts of pollutants of concern.

22. Detain an additional 20 to 30 percent of runoff water, time release strategically.

Control the sources of urban and industrial runoff (reduce the amount of applied water, or reduce loading of agrochemicals and other pollutants).

23. Enforce existing source control regulations.
24. Provide incentives for additional source control.

25. Better planning of new development.

Watershed Management

26. *Focus on nonpoint-source components of watershed management.* Incentives and/or coordination with ongoing watershed management programs that promote and protect Delta water quality and fisheries. Includes watershed management within the area contributing to problems or able to mitigate problems within the Delta (including areas outside of the legal Delta). *(Note that this action differs only in focus from actions 35 and 37.)*

Mine Drainage

Implement moderate on-site mine drainage remediation measures developed in site-specific studies at the Walker Mine, Malakoff Diggins, Leviathon Mine, Iron Mountain Mine, and Penn Mine sites. Control runoff from these and other high-priority sites based on current water quality objectives for pollutants.

27. Fund through pollution-credit trading (reduce loading from mines in-lieu of costly wastewater treatment plant upgrades).
28. Fund by other means.

Boat Discharges

29. Enforce regulation of boat discharges within the Delta and in water bodies tributary to the Delta.

Point Source Pollution Control

Industrial and municipal wastewater treatment

30. Treat municipal wastewater in wetlands.
31. Encourage pollution credit trading to reduce pollution in a cost-effective manner.
32. Incentives for phased conversion of municipal wastewater treatment facilities from processes producing large concentrations of disinfection byproduct precursors (DBPs).
33. Incentives for reclamation and reuse of industrial and municipal wastewater.

Watershed Management

34. *Focus on point-source components of watershed management.* Incentives and/or coordination with ongoing watershed management programs that promote and protect Delta water quality and fisheries. Includes watershed management within the area contributing to problems or able to mitigate problems within the Delta (including areas outside of the legal Delta). *(Note that this action differs only in focus from actions 27 and 37.)*

Water Supply Treatment

35. Provide incentives to upgrade drinking water treatment through filtration.

Habitat Restoration

Watershed Management

36. *Focus on nonpoint-source and habitat-restoration components of watershed management.* Incentives and/or coordination with ongoing watershed management programs that promote and protect Delta water quality and fisheries. Includes watershed management within the area contributing to problems or able to mitigate problems within the Delta (including areas outside of the legal Delta). *(Note that this action differs only in focus from actions 27 and 35.)*

Riparian Habitat Restoration

Improve riparian habitat.

37. In watersheds of participating water districts.
38. Restore riverine channel features on the Sacramento River upstream of the Delta, including tributaries.
39. Restore and enhance riparian vegetation on the Sacramento River from Verona to Colusa.

40. Restore riverine channel features on the San Joaquin River upstream of the Delta (channel configurations to deepen the San Joaquin) and on its tributaries.

Research

41. Research identified or suspected toxicity in water and sediment through toxicity testing, toxicity identification evaluations, or by other reasonable means.